Daniele Caratelli

Personal Details

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Education

Ph.D. in Economics, Stanford University — June 2023 (Expected)

B.A. in Economics and Mathematics (Honors), University of Chicago — 2011 – 2015

References

Patrick Kehoe (Primary)
Dept. of Economics, Stanford University
pkehoe@stanford.edu

Adrien Auclert
Dept. of Economics, Stanford University
aauclert@stanford.edu

Robert Hall
Dept. of Economics, Stanford University
rehall@stanford.edu

Elena Pastorino
Hoover Institution, Stanford University
epastori@stanford.edu

Research Fields

Macroeconomics, Monetary Economics

Experience

Stanford University — Sep 2017 – Present

Economics PhD Student

As a PhD student, I conduct independent research on important, policy-relevant topics in macroeconomics. Most of my work uses quantitative macroeconomic models and econometric techniques to study the role of fiscal and monetary policy in shaping macroeconomic outcomes. This work will ultimately be submitted to peer-reviewed journals, and will be used as chapters of my doctoral dissertation. A list of these papers can be found on the following page.

Bank of England — Jun 2020 – Aug 2022

Ph.D. Intern (paid - 40 hours/week) & Academic Visitor (unpaid)

I worked with a collaborator to develop and execute an ongoing research project that studies the spillovers of monetary policy across countries. Our work, which will eventually be submitted to a journal, uses microeconomic data, state-level time series as well as econometric techniques to document differences in states' tradable shares and hand-to-mouth shares. We argue that these two quantities (and their interaction) are key to understanding the extent to which fiscal and monetary stimulus affects personal consumption expenditures.

Stanford University — Sep 2021 – Jun 2022, Jun 2018 – Dec 2019

Research Assistant to Professors Kehoe, Pastorino, & Auclert (paid - 20 hours/week)

I developed Stata code to construct aggregated labor market time series from micro-data from the Bureau of Labor Statistics. These series were then used to calibrated a quantitative model. I developed Matlab code that solved heterogeneous agent models, to study the effect of debt relief on macroeconomic variables such as consumption and investment. I also used *Occbin* to solve a version of the model with occasionally binding constraints.

Federal Reserve Bank of New York — Aug 2015 – Aug 2017

Research Analyst, Macro and Monetary Division (paid - 40 hours/week)

I performed research and policy analysis in the Time Series Analysis Team. I was responsible for publishing the "NY Fed Nowcast Report" for which I used Matlab to implement an advanced statistical framework known as dynamic factor models used to forecast GDP. The report was made public on a weekly basis and was regularly presented to the President of the NY Fed. Finally, this work was published in a paper for the Annual Review of Economics.

For another policy project, I used advanced statistical tools, such as LASSO regressions, to evaluate what effects pre-specified adverse scenarios would have on the balance sheets of systemically

important banks. This policy work was presented to high-level regulatory officials at the Federal Reserve Board.

Working Papers

"Labor Market Recoveries Across the Wealth Distribution"

Main Dissertation Chapter

This paper studies why, after the onset of recessions, low-wealth workers experience larger falls and slower recoveries in earnings than high-wealth workers. I show that differences in job-switching and job-losing rates play an important role in explaining these dynamics. To do so, I build a quantitative search and matching model with incomplete markets and on-the-job search in which wages are determined by an alternating offer bargaining protocol that, unlike traditional settings, accommodates risk-averse workers and wealth accumulation. The wages of job-switchers result either from Bertrand-competition between firms or, if the poaching firm is sufficiently more productive than the incumbent, from one-on-one negotiation between poacher and worker. This model includes an ingredient I document empirically: over the first fifteen months following a job switch workers experience a 6.4 percentage point increase in their job-loss probability. Through this model I conclude that cyclical differences in job-switching and job-losing by wealth, which the model can endogenously reproduce, explain 40 percent of the gap in earnings recovery between low- and high-wealth workers following the Great Recession. I then apply the model to study the post-Pandemic behavior of job-switching and show that fiscal stimulus alleviated its fall and sustained its recovery.

"Optimal Monetary Policy with Menu Costs is Nominal Wage Targeting" with Basil Halperin

We show analytically that ensuring stable nominal wage growth is optimal monetary policy in a multisector economy with menu costs. This nominal wage targeting contrasts with inflation targeting, the optimal policy prescribed by the textbook New Keynesian model in which firms are permitted to adjust their prices only randomly and exogenously. The intuition is that stabilizing nominal wages minimizes the number of firms which need to adjust their prices, and therefore minimizes the resources wasted on menu costs. We show that the analytical result that nominal wage targeting is superior to inflation targeting carries over in a rich quantitative model.

Work in Progress

"Heterogeneous Currency Union: MPCs and Tradable Shares " with Riccardo Masolo

Published Papers

"Macroeconomic Nowcasting and Forecasting with Big Data" with Brandyn Bok, Domenico Giannone, Argia Sbordone, and Andrea Tambalotti Jackson, ***Annual Review of Economics***, Vol. 10:615-643, 2018

Teaching Experience

Department of Economics, Stanford University (paid - 20 hours/week)

TA for Luigi Bocola, Econ 168 (International Finance) Apr – Jun 2021
Conducted teaching sessions for 25 students. The course dealt with understanding the key tenants of international economics but also more complex issues such as the causes of sovereign debt crises. As teaching assistant I prepared sections so that students could gain a deeper understanding of the class material. I corrected and graded students' homeworkers and tests.

TA for Scott McKeon, Econ 102A (Intro to Statistics) Sep – Dec, 2020 & Jan – Mar, 2021
Conducted teaching sessions for 25 students. The course dealt with the basics of econometrics and statistics. As teaching assistant I prepared sections so that students could gain a deeper understanding of the class material. I corrected and graded students' homeworkers and tests.

Awards & Fellowships

Best Job Market Paper Award, EEA and UniCredit Foundation 2022

E.S. Shaw and B.F. Haley Fellowship for Economics, SIEPR 2022 – 2023

	Dissertation Fellowship, Federal Reserve Bank of St. Louis	Summer 2021
	Doctoral Grant, Washington Center for Equitable Growth	2021
	David S. Hu Award, The University of Chicago	2015
	Becker Friedman Institute Award for Academic Achievement, The University of Chicago	2015
Refereeing	*Journal of Business & Economic Statistics*; *International Journal of Forecasting*	
Invited Talks	"Labor, Firms, and Macro" Job Market Workshop (University of Pennsylvania)	2022
External Presentations	St. Louis Fed, Dartmouth College, Bank of England	2021
Pre-academic Work	**"Opening the Toolbox: The Nowcasting Code on GitHub"**, ***Liberty Street Economics***	
	"Just Released: Introducing the New York Fed Staff Nowcast", ***Liberty Street Economics***	
Other	Programming: Julia, Python, Matlab, and Stata	
	Languages: Italian (native) and English (native)	
	Citizenship: USA, Italy	